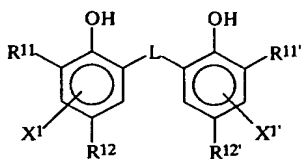


What is claimed is:

1. A photothermographic material containing, on a substrate, at least a photosensitive silver halide, a non-photosensitive organic silver salt, a reducing agent and a binder in which the total silver iodide content of the photosensitive silver halide is 40 mol% or more and 100 mol% or less, and the coating amount of the photosensitive silver halide in terms of an amount of silver is 0.0005 g/m² or more and 0.4 g/m² or less.
2. A photothermographic material according to claim 1, wherein the photosensitive silver halide is formed in a state where the non-photosensitive organic silver salt is not present.
3. A photothermographic material according to claim 1, wherein the total silver iodide content is 90 mol% or more and 100 mol% or less.
4. A photothermographic material according to claim 1, wherein the coating amount of the photosensitive silver halide, as an amount of silver, is 0.005 g/m² or more and 0.1 g/m² or less.
5. A photothermographic material according to claim 1, wherein the coating amount of the photosensitive silver halide, as an amount of silver, is 0.005 g/m² or more and 0.05 g/m² or less.
6. A photothermographic material according to claim 1, wherein the average particle size of the photosensitive silver halide is 5 nm or more and 50 nm or less.
7. A photothermographic material according to claim 1, wherein the reducing agent contains a compound represented by the general formula (R):

General formula (R)

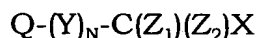


in which R^{11} and $R^{11'}$ each represents independently an alkyl group of 1 to 20 carbon atoms, R^{12} and $R^{12'}$ each represents independently an alkyl group of 1 to 20 carbon atoms, L represents an $-S-$ group or $-CHR^{13}-$ group, R^{13} represents a hydrogen atom or an alkyl group of 1 to 20 carbon atoms, and X^1 and $X^{1'}$ each represents independently a hydrogen atom or a group capable of substitution on a benzene ring.

8. A photothermographic material according to claim 7, wherein R^{11} and $R^{11'}$ in the general formula (R) each represents independently a secondary or tertiary alkyl group of 3 to 15 carbon atoms.

9. A photothermographic material according to claim 1, which further comprising a compound represented by the following general formula (H):

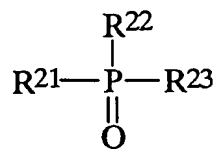
General formula (H)



in which Q represents an alkyl group, aryl group or heterocyclic group, Y represents a bivalent connection group, N represents 0 or 1, Z_1 and Z_2 each represents a halogen atom, and X represents a hydrogen atom or an electron attractive group.

10. An image forming method for a photothermographic material which comprises exposing a photothermographic material according to claims 1 by using a semiconductor laser having an emission peak intensity at a wavelength of from 350 nm to 450 nm as a light source.

11. A photothermographic material according to claim 1, wherein the average particle size of the photosensitive silver halide is 5 nm or more and 40 nm or less.
12. A photothermographic material according to claim 1, wherein the average γ -phase ratio of the photosensitive silver halide is 5 mol% or more and 90 mol% or less.
13. A photothermographic material according to claim 1, wherein the average γ -phase ratio of the photosensitive silver halide is 25 mol% or more and 50 mol% or less.
14. A photothermographic material according to claim 1, further comprising a compound in which a one-electron oxidant formed by one-electron oxidation can release one electron or more electrons.
15. A photothermographic material according to claim 1, wherein the non-photosensitive organic silver salt contains silver behenate by 40 mol% or more and 99 mol% or less.
16. A photothermographic material according to claim 1, wherein the non-photosensitive organic silver salt contains silver behenate by 65 mol% or more and 85 mol% or less.
17. A photothermographic material according to claim 1, further comprising a development accelerator.
18. A photothermographic material according to claim 1, further comprising a compound represented by the following general formula (D):
- General formula (D)



in which R^{21} to R^{23} each represents independently an alkyl group, aryl group, alkoxy group, aryloxy group, amino group or heterocyclic group.

19. An image forming method for a photothermographic material according to claim 10, wherein the exposure illuminance of the semiconductor laser is 1 mW/mm^2 or more.

20. An image forming method for the photothermographic material according to claim 10, wherein the exposure illuminance of the semiconductor laser is 10 mW/mm^2 or more and 50 mW/mm^2 or less.